

CLAIMS

What is claimed is:

sub A 7 1. A method for service provisioning a customer with at least one software application from a service provider, comprising steps of:

establishing a set of attributes of the service provision;

selecting from said set of attributes for defining a Service Level Agreement (SLA) with the service provider; and

provisioning the customer in accordance with constraints imposed by the SLA.

2. A method as in claim 1, and further comprising a step of re-provisioning the customer in response to a change in the SLA.

3. A method as in claim 1, and further comprising a step of re-provisioning the customer, within the constraints imposed by the SLA, in response to at least one customer service-related criterion.

4. A method as in claim 1, and further comprising a step of re-provisioning the customer, within the constraints imposed by the SLA, in response to at least one service provider criterion.

5. A method as in claim 1, wherein the step of provisioning the customer includes a step of allocating service provider data processing resources to a data processing task of the customer.

12. A method as in claim 1, and further comprising a step of re-provisioning the customer, within the

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549 A7 constraints imposed by the SLA, by allocating at least some required data processing resources from the customer to a data processing task of the customer.

13. A method as in claim 1, wherein said attributes comprise a cost attribute.

14. A method as in claim 1, wherein said attributes comprise an interactivity attribute.

15. A method as in claim 1, wherein said attributes comprise an availability attribute.

16. A method as in claim 1, wherein said SLA is comprised of at least one of a cost attribute, an interactivity attribute, and an availability attribute.

17. A method as in claim 1, wherein the service provider is a virtual service provider, and wherein the step of provisioning the customer, within the constraints imposed by the SLA, includes a step of allocating at least some required data processing resources from at least one other service provider to a data processing task of the customer.

18. A method as in claim 1, wherein the service provider is a value-added services provider, and wherein the step of provisioning the customer, within the constraints imposed by the SLA, includes a step of allocating at least some required data processing resources from at least one other service provider to a data processing task of the customer.

19. A method as in claim 1, wherein the service provider is a value-added services provider, and wherein the step of provisioning the customer, within the

Sub A 7 constraints imposed by the SLA, includes a step of allocating at least some required data processing resources from data processing resources of the value-added services provider, and from at least one other service provider, to a data processing task of the customer.

20. A method as in claim 1, wherein the service provider is a value-added services provider, and wherein the step of provisioning the customer, within the constraints imposed by the SLA, includes a step of allocating at least some required data processing resources from data processing resources of the value-added services provider, from at least one other service provider, and from the customer, to a data processing task of the customer, and further comprising a step of re-provisioning the customer, within the constraints imposed by the SLA, by changing the allocation of at least some of the allocated data processing resources.

21. A method as in claim 1, and further comprising a step of re-provisioning the customer, within the constraints imposed by the SLA, in response to a change in data processing resource utilization.

22. A method as in claim 1, and further comprising a step of re-provisioning the customer, within the constraints imposed by the SLA, in response to a change in predicted or actual data processing resource availability.

23. A method as in claim 1, and further comprising a step of re-provisioning the customer, within the constraints imposed by the SLA, in response to a failure of a data processing resource.

24. A method as in claim 1, wherein the service provider is a virtual service provider, and wherein the

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step of provisioning the customer, within the constraints imposed by the SLA, includes a step of allocating at least some required data processing resources from at least one data processing site that offers data processing capacity for use in satisfying data processing requirements of the customer.

25. A method for service provisioning a customer with at least one software application from a service provider, comprising steps of:

establishing a set of attributes of the service provision;

selecting from said set of attributes for defining a Service Level Agreement (SLA) with the service provider;

provisioning the customer, within the constraints imposed by the SLA, by allocating at least some required data processing resources to at least one data processing site that offers data processing capacity for use; and

transparently re-provisioning the customer, within the constraints imposed by the SLA, by re-allocating at least some required data processing resources from the at least one data processing site that offers data processing capacity for use to one of the customer, the service provider, or another service provider.

26. A method for service provisioning a customer with at least one software application from a service provider, comprising steps of:

establishing a set of attributes of the service

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provision;

selecting from said set of attributes for defining a Service Level Agreement (SLA) with the service provider;

provisioning the customer, within the constraints imposed by the SLA, by allocating at least some required data processing resources to at least one other service provider that offers data processing capacity for use; and

transparently re-provisioning the customer, within the constraints imposed by the SLA, by re-allocating at least some required data processing resources from the at least other service provider that offers data processing capacity for use to one of the customer, the service provider, or a data processing site that offers data processing capacity for use.

27. A data processing system for service provisioning a customer with at least one software application from a service provider, said service provider and said customer being coupled together through a communication network, said system comprising:

a system management server for establishing a set of attributes of the service provision; and

a customer interface for selecting from said set of attributes for defining a Service Level Agreement (SLA) with the service provider, said system management server being responsive to said SLA for provisioning the customer in accordance with constraints imposed by the SLA.

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28. A system as in claim 27, wherein said system management server is responsive to at least one of a customer service-related criterion, a service provider criterion, or a change in a data processing environment, for re-provisioning the customer, within constraints imposed by said SLA, by allocating service provider data processing resources to a data processing task of the customer, or by allocating customer data processing resources to a data processing task of the customer, or by allocating data processing resources of another service provider to a data processing task of the customer, or by allocating all required data processing resources from at least one other service provider to a data processing task of the customer, or by allocating data processing resources from a remote data processing site to a data processing task of the customer.

29. A system as in claim 27, wherein said attributes comprise at least one of a cost attribute, an interactivity attribute, and an availability attribute.

30. A system as in claim 27, wherein the service provider is a virtual service provider, and wherein the customer is provisioned and re-provisioned, within the constraints imposed by the SLA, by allocating at least some required data processing resources from at least one other service provider to a data processing task of the customer.

31. A system as in claim 27, wherein the service provider is a value-added services provider, and wherein the customer is provisioned and re-provisioned, within the constraints imposed by the SLA, by allocating at least some required data processing resources from at least one other service provider to a data processing task of the customer.

32. A system as in claim 27, wherein the service

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provider is a value-added services provider, and wherein the customer is provisioned and re-provisioned, within the constraints imposed by the SLA, by allocating at least some required data processing resources from data processing resources of the value-added services provider, and from at least one other service provider, to a data processing task of the customer.

33. A system as in claim 27, wherein the service provider is a value-added services provider, and wherein the customer is provisioned and re-provisioned, within the constraints imposed by the SLA, by allocating at least some required data processing resources from data processing resources of the value-added services provider, from at least one other service provider, and from the customer, to a data processing task of the customer, and further re-provisioning the customer, within the constraints imposed by the SLA, by changing the allocation of at least some of the allocated data processing resources.

34. A system as in claim 27, wherein the customer is re-provisioned, within the constraints imposed by the SLA, in response to a change in at least one of data processing resource utilization, a change in predicted or actual data processing resource availability, or a failure of a data processing resource.

35. A computer program embodied on at least one computer readable medium for service provisioning a customer with at least one software application from a service provider, said program comprising:

first executable code for establishing a set of attributes of the service provision;

second executable code, responsive to a user input,

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for selecting from said set of attributes for defining a Service Level Agreement (SLA) with the service provider;

third executable code for provisioning the customer, within the constraints imposed by the SLA, by allocating at least some required data processing resources to at least one of the service provider, the customer, to another service provider, or to a data processing site that offers data processing capacity for use; and

fourth executable code for transparently re-provisioning the customer, within the constraints imposed by the SLA, by re-allocating at least some required data processing resources between at least one of the service provider, the customer, the another service provider, or the data processing site that offers data processing capacity for use.

36. A system for service provisioning a customer with a software service, comprising:

a plurality of data processing sites coupled to a communication network, individual ones of said sites comprising program code for registering available data processing capability using said communication network; and

a virtual service provider coupled to the customer through the communication network, said virtual service provider comprising a system management server for establishing a set of attributes of a customer service provision, and for allocating data processing capability for provisioning the customer from the data processing capability registered by said plurality of

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data processing sites.

37. A system as in claim 36, wherein said virtual service provider further comprises a customer interface for enabling the customer to select from said set of attributes for defining a Service Level Agreement (SLA) with the service provider, said system management server being responsive to said SLA for provisioning the customer in accordance with constraints imposed by the SLA.

38. A system as in claim 36, wherein at least some of said plurality of data processing sites comprise personal computers.

39. A system as in claim 36, wherein said individual ones of said data processing sites comprising said program code for registering available data processing capability register said available data processing capability with an e-marketplace that is accessible by said virtual service provider using said communication network.

40. A system as in claim 36, wherein said individual ones of said data processing sites comprising said program code for registering available data processing capability register said available data processing capability, and a desired rate for using said available data processing capability, with an e-marketplace accessible by said virtual service provider using said communication network.